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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,695	09/22/2003	Ramani Mani	125643-1	5199

6147 7590 06/07/2007  
GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER
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RODRIGUEZ, WILLIAM H

ART UNIT	PAPER NUMBER
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3746

MAIL DATE	DELIVERY MODE
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06/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/664,695

Applicant(s)

MANI ET AL.

Examiner

/William H. Rodriguez/

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-26 and 28-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-26 and 28-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

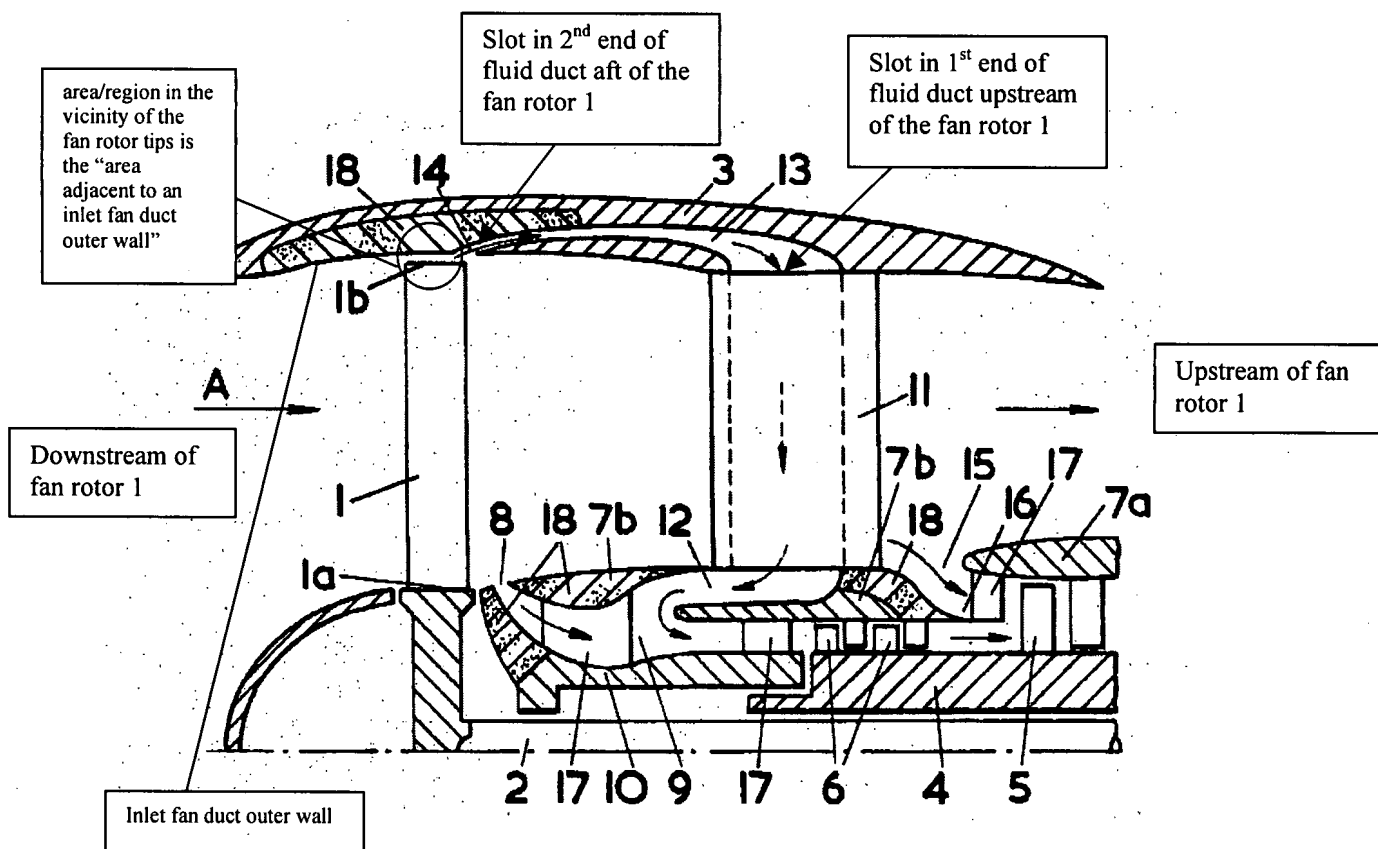
**DETAILED ACTION**

This office action is in response to the petition to revive granted on 5/17/2007. Since the examiner has applied new grounds of rejection, this office action is being made non-final to afford the applicant the opportunity to respond to the new grounds of rejection.

***Response to Arguments***

1. Applicant's arguments filed 10/03/2006 have been fully considered but they are not persuasive.

On page 9 of the response applicant argues "Howell does not disclose a first end of the fluid duct that is located upstream of the fan rotor". Examiner disagrees because as clearly shown in figure 1 of Howell the slot in the first end of the fluid duct is located upstream of the fan rotor 1.



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On page 9 of the response applicant argues "Howell is not intended to alter the flow speed adjacent to the inlet fan duct, but rather to bleed excess pressure from the immediate vicinity of the fan rotor tips". Notice that the area/region in the vicinity of the fan rotor tips is the "area adjacent to an inlet fan duct outer wall". Also, notice that as the flow A enters the 2<sup>nd</sup> end of the fluid duct the speed/velocity is accelerated because the 2<sup>nd</sup> has a very small cross sectional area in comparison to the large cross-sectional area of the inlet fan duct of the engine. Therefore, Howell clearly teaches that the air velocity adjacent to an inlet fan duct outer wall is increased.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19, 21-26, 28 and 30-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Howell (US 3,735,593).

Howell teaches an apparatus comprising: a nacelle 3, an acoustic liner 18, a fluid duct 13 having a first end with a slot being disposed upstream of a fan rotor 1 and a second end with a slot disposed aft of said fan rotor 1, said fluid duct said first slot and said second slot being circumferential as indicated by the presence of the centerline on the bottom of figure 1. Notice that the cross sectional area of the second end expands towards the first end, said fluid duct is substantially disposed within the nacelle. Notice that the area/region in the vicinity of the fan rotor tips is the "area adjacent to an inlet fan duct outer wall". Also, notice that as the flow A enters the 2<sup>nd</sup> end of the fluid duct the speed/velocity is accelerated because the 2<sup>nd</sup> has a very

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small cross sectional area in comparison to the large cross-sectional area of the inlet fan duct of the engine. Therefore, Howell clearly teaches that the air velocity adjacent to an inlet fan duct outer wall is increased. See particularly figure 1 above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howell (US 3,735,593).

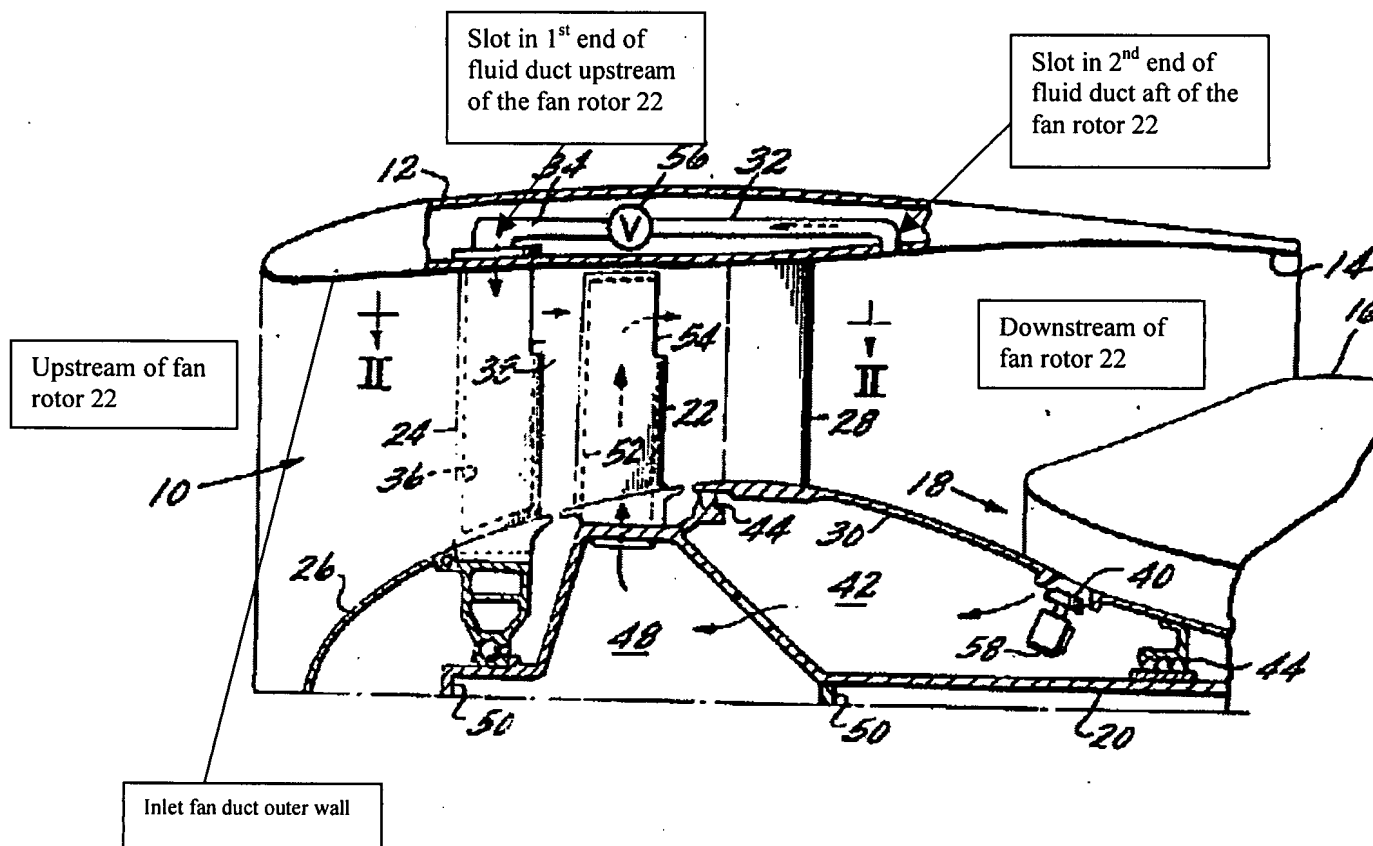
6. Regarding the claimed limitations "said fluid duct is of sufficient dimension", to the extent that the claimed invention produces the claimed desired results, the applied prior art structure being the same, does the same. In addition, it has been held that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), MPEP 2144.05 II. The sizing of the duct is considered a desired result that would be an obvious design optimization of said duct.

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### Conclusion

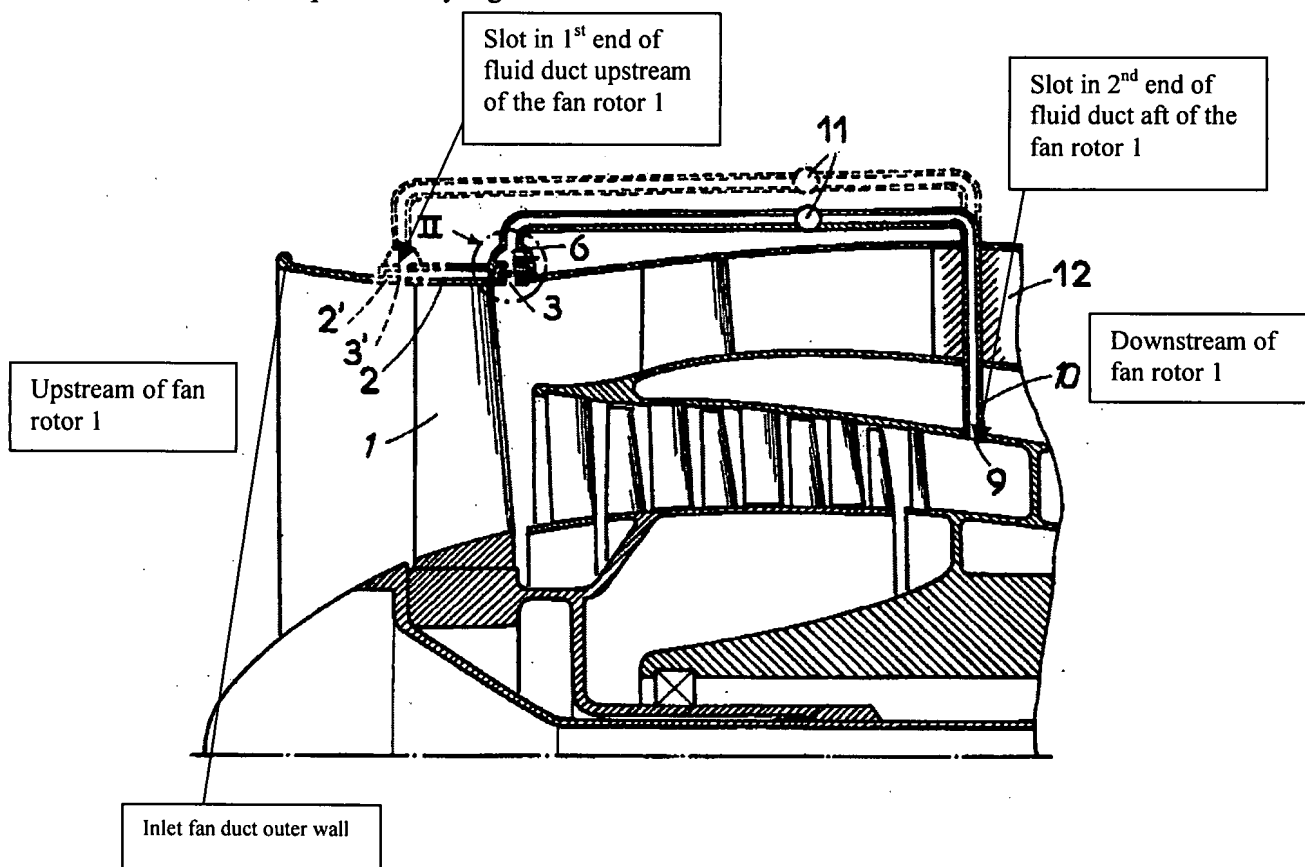
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 3,572,960 particularly figure 1

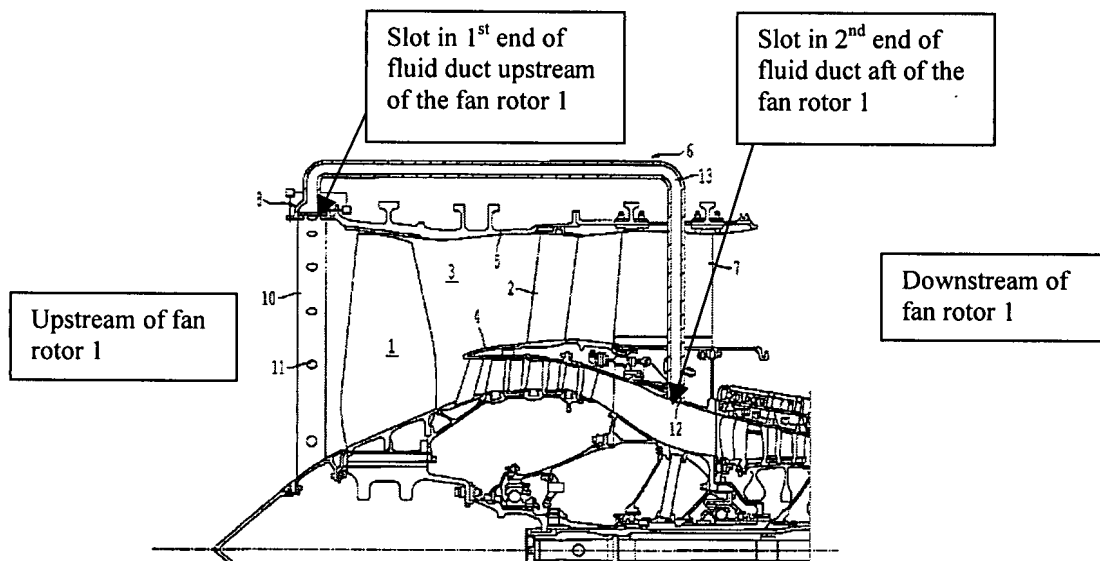


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US 4,199,295 particularly figure 1



US 6,546,734 particularly figure 1



***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /William H. Rodríguez/ whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Rodríguez/  
Primary Examiner  
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